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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

DAO, THUY CHAN

ART UNIT

PAPER NUMBER

2192

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/047,769	Applicant(s) KLAVE ET AL.	
	Examiner Thuy Dao	Art Unit 2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 47-53,55-63,65-72,74 and 75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 47-53,55-63,65-72,74 and 75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.

Applicant's submission filed on December 20, 2007 has been entered.

2. Claims 47-53, 55-63, 65-72, and 74-75 have been examined.

Response to Amendments

3. In the amendments filed September 29, 2006, the Applicants cancelled claims 1-46 and add new claims 47-75, in which claims 57-65 direct to "[a] computer-readable medium for carrying program data".

For the record, the examiner treats a computer-readable medium as a computer-readable *storage* medium as described in the specification, page 2, lines 9-12.

Specification

4. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The

disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In the instant application, the phrase in lines 1-2 is considered to read as - -An embedded system ... by loading individual software components [[is disclosed]].- -.

Appropriate correction is required.

Response to Arguments

5. Applicants' arguments have been fully considered. However, they are not persuasive.

a) 35 USC 103(a) based on Chrisop in view of Tominaga (Remarks, pp. 8-10):

The examiner would like to direct Applicants' attention to Advisory action mailed October 31, 2007, page 2:

"1) 35 USC 103(c) (Remarks, page 8, paragraph I):

The examiner respectfully disagrees with Applicants' arguments. The reference Chrisop (US Patent No. 7,212,306, only 2 inventors Chrisop and Klave) was filed on August 31, 2001, assigned to Sharp Laboratories of America, Inc. on September 29, 2005, and subsequently assigned to Sharp Kabushiki Kaisha on June 12, 2007.

The instant application was filed on January 15, 2002 (3 inventors Chrisop, Klave, and Sojian) and assigned to Sharp Laboratories of America, Inc. on January 15, 2002.

The instant application and the Chrisop reference, at the time the invention was made, were not owned by the same person or subject to an obligation of assignment to the same person or organization.

Accordingly, the reference Chrisop cannot be disqualified as prior art for purposes of 35 USC 103(c)" (emphasis added).

MPEP 706.02(I)(1)(I) clearly sets forth:

“The burden of establishing that subject matter is disqualified as prior art is placed on applicant once the examiner has established a prima facie case of obviousness based on the subject matter. For example, the fact that the reference and the application have the same assignee is not, by itself, sufficient evidence to disqualify the prior art under 35 U.S.C. 103(c). There must be a statement that the common ownership was ‘at the time the invention was made.’ “ (emphasis added).

MPEP 706.02(I)(2)(II) further sets forth:

“It is important to recognize just what constitutes sufficient evidence to establish common ownership at the time the invention was made. The common ownership must be shown to exist at the time the later invention was made. A statement of present common ownership is not sufficient. In re Onda, 229 USPQ 235 (Comm'r Pat. 1985)” (emphasis added).

Accordingly, Applicants’ arguments are not persuasive. The examiner respectfully maintains that the reference Chrisop cannot be disqualified as prior art for purposes of 35 USC 103(c).

b) 35 USC 103(a) based on Admitted Prior Art (APA) in view of Tominaga (Remarks, page 10):

As also set forth in the Advisory action:

“2) As set forth in the previous Office action mailed June 21,2007 (pp, 6-8, paragraph 7), claims 47, 57, and 67 are rejected as being unpatentable over Admitted Prior Art in view of Tominaga, but not over Chrisop in view of Tominaga as asserted by the Applicants (Remarks, page 8, paragraph II)” (emphasis added).

Accordingly, the examiner respectfully maintains the 35 USC §103(a) rejection over claims 47-53, 55-63, 65-72, and 74-75 as re-applied below.

Claim Rejections – 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 47-53, 55-63, 65-72, and 74-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chrisop (art of record, US 7,212,306) in view of Tominaga (art of record, US Patent No. 7,148,980).

Claim 47:

Chrisop discloses *a multi-functional peripheral comprising a printer configured to reduce volatile memory usage by selectively loading some individual software components and not loading other individual software components, the multi-functional peripheral comprising:*

a processor (e.g., col.1: 12-17);

volatile memory in electronic communication with the processor (e.g., col.1: 17-25);

non-volatile memory in electronic communication with the processor (e.g., col.1: 26-37) comprising:

a plurality of individual software components (e.g., col.1: 12-25); and

load each of the plurality of individual software components that are to be loaded, into the volatile memory so that these software components are all loaded into the volatile memory at the same time (e.g., col.1: 26-47).

In an analogous art, Tominaga further discloses:

a loading table that indicates which of the plurality of individual software components are loaded into the volatile memory and which of the plurality of individual software components are not loaded into the volatile memory (e.g., FIG. 26, Administration Table with column License, col.16: 59 – col.17: 18),

wherein the individual software components that are loaded into the volatile memory correspond to a configuration of the multi-function peripheral (e.g., FIG. 26, Printer Type, Printer Name, IP Address, Finishing Option; FIG. 28B, step S2830 “Does Printer Need License? YES/NO”, col.18: 50 – col.19: 32), and

wherein the individual software components that are not loaded into the volatile memory do not correspond to the configuration of the multi-functional peripheral (e.g., FIG. 30, B/W MFP 105 – Printer 7 Offline, License Violation, col.18: 25-42);

instructions stored in the non-volatile memory that are executable to:

examine the loading table to determine which of the plurality of individual software components are to be loaded into the volatile memory (e.g., FIG. 29 and 26, col.16: 59 – col.17: 18); and

load each of the plurality of individual software components that are to be loaded, as indicated in the loading table, into the volatile memory so that these software components are all loaded into the volatile memory at the same time (e.g., FIG. 26, FIG. 28B, col.18: 50 – col.19: 32); and

not load any of the plurality of individual software components that are not to be loaded into the volatile memory as indicated in the loading table (e.g., col.18: 25-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga’s teaching into Chrisop’s teaching. One would have been motivated to do so to substantiate the validity of use of certain software as suggested by Tominaga (e.g., col.11: 37-64).

Claim 48:

The rejection of claim 47 is incorporated. Chrisop also discloses *the multi-functional peripheral is a printer/fax/copier* (e.g., col.1: 12-25).

Claim 49:

The rejection of claim 47 is incorporated. Tominaga further discloses *an input component in electronic communication with the processor for a user to enter user input and thereby configure the loading table* (e.g., col.16: 59 – col.17: 18).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 50:

The rejection of claim 49 is incorporated. Tominaga further discloses *a display in electronic communication with the processor that displays information to the user relating to the loading table* (e.g., col.18: 25-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 51:

The rejection of claim 50 is incorporated. Tominaga further discloses *a menu structure that may be navigated by a user using the input component and the display to configure the loading table* (e.g., col.18: 50 – col.19: 32).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 52:

The rejection of claim 47 is incorporated. Tominaga further discloses *the loading table is a license table comprising a list of licenses relating to the individual software components* (e.g., col.16: 59 – col.17: 18).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 53:

The rejection of claim 52 is incorporated. Chrisop also discloses *the individual software components with licenses, as indicated by the license table, are loaded into the volatile memory* (e.g., col.18: 25-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 55:

The rejection of claim 47 is incorporated. Chrisop also discloses *a communications module in electronic communication with the processor for communications with a computer; and a web interface accessible by a user through use of a web browser to configure the loading table* (e.g., col.3: 26 – col.4: 55).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claim 56:

The rejection of claim 47 is incorporated. Tominaga further discloses *examine a hardware configuration by a loader application; and modify the loading table based on the hardware configuration* (e.g., col.4: 31 – col.5: 59).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into Chrisop's teaching. One would have been motivated to do so as set forth in claim 47 above.

Claims 57-63 and 65-66:

Claims 57-63 and 65-66 recite the same limitations as those of claims 47-53 and 55-56, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of the above claims, they also teach all of the limitations of claims 57-63 and 65-66.

Claims 67-72 and 74-75:

Claims 67-72 and 74-75 recite the same limitations as those of claims 47-53 and 55-56, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of the above claims, they also teach all of the limitations of claims 67-72 and 74-75.

8. Claims 47, 57, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over APA (art of record, Admitted Prior Art) in view of Tominaga.

Claim 47:

APA discloses *a multi-functional peripheral comprising a printer configured to reduce volatile memory usage by selectively loading some individual software components and not loading other individual software components, the multi-functional peripheral comprising:*

a processor (e.g., col.1: 22-25);

volatile memory in electronic communication with the processor (e.g., col.2: 3-12);

non-volatile memory in electronic communication with the processor (e.g., col.2: 3-12) comprising:

a plurality of individual software components (e.g., col.2: 8-15); and

load each of the plurality of individual software components that are to be loaded, into the volatile memory so that these software components are all loaded into the volatile memory at the same time (e.g., col.2: 3-15).

In an analogous art, Tominaga further discloses:

a loading table that indicates which of the plurality of individual software components are loaded into the volatile memory and which of the plurality of individual software components are not loaded into the volatile memory (e.g., FIG. 26, Administration Table with column License, col.16: 59 – col.17: 18),

wherein the individual software components that are loaded into the volatile memory correspond to a configuration of the multi-function peripheral (e.g., FIG. 26, Printer Type, Printer Name, IP Address, Finishing Option; FIG. 28B, step S2830 “Does Printer Need License? YES/NO”, col.18: 50 – col.19: 32), and

wherein the individual software components that are not loaded into the volatile memory do not correspond to the configuration of the multi-functional peripheral (e.g., FIG. 30, B/W MFP 105 – Printer 7 Offline, License Violation, col.18: 25-42);

instructions stored in the non-volatile memory that are executable to:

examine the loading table to determine which of the plurality of individual software components are to be loaded into the volatile memory (e.g., FIG. 29 and 26, col.16: 59 – col.17: 18); and

load each of the plurality of individual software components that are to be loaded, as indicated in the loading table, into the volatile memory so that these software components are all loaded into the volatile memory at the same time (e.g., FIG. 26, FIG. 28B, col.18: 50 – col.19: 32); and

not load any of the plurality of individual software components that are not to be loaded into the volatile memory as indicated in the loading table (e.g., col.18: 25-42).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine Tominaga's teaching into APA's teaching. One

would have been motivated to do so to substantiate the validity of use of certain software as suggested by Tominaga (e.g., col.11: 37-64).

Claim 57:

Claim 57 recites the same limitations as those of claim 47, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of the above claim, they also teach all of the limitations of claim 57.

Claim 67:

Claim 67 recites the same limitations as those of claim 47, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the references teach all of the limitations of the above claim, they also teach all of the limitations of claim 67.

Conclusion

9. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Art Unit: 2192

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/T Dao/

/Tuan Q. Dam/

Supervisory Patent Examiner, Art Unit 2192